

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows, substituting any amended claim(s) for the corresponding pending claim(s):

1 1. (Currently Amended) A method of providing electrostatic discharge protection for an integrated
2 circuit, comprising:
3 mounting an integrated circuit die on a lead frame including one or more leads or pins;
4 encapsulating at least part of the integrated circuit die and a portion of the lead frame with
5 a plastic or epoxy material; and
6 folding an unencapsulated portion of the lead frame other than the leads or pins around sides
7 of the encapsulated integrated circuit die and over or adjacent to a peripheral upper surface of the
8 plastic or epoxy material.

1 2. (Original) The method of claim 1, further comprising:
2 connecting the portion of the lead frame folded around the sides of the encapsulated
3 integrated circuit die and over or adjacent to the peripheral upper surface of the plastic or epoxy
4 material to a ground voltage.

1 3. (Currently Amended) The method of claim 1, wherein the step of encapsulating at least part of
2 the integrated circuit die with a plastic or epoxy material further comprising:

3 after mounting the integrated circuit die on the lead frame, encapsulating exposed surfaces
4 of the integrated circuit die except for a sensing surface; and

5 encapsulating wire bonds connecting the integrated circuit die to portions of the lead frame
6 connected to the leads.

1 4. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further
4 comprisingcomprises:

5 folding portions of the lead frame other than the leads or pins around each side of the
6 encapsulated integrated circuit die.

1 5. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further
4 ~~comprising~~comprises:

5 folding a first portion of the lead frame other than the leads or pins around a first side of the
6 encapsulated integrated circuit die, wherein the first portion includes an opening providing access
7 for a connector to pins electrically connected to the integrated circuit die.

1 6. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further
4 ~~comprising~~comprises:

5 folding portions of the lead frame other than the leads or pins only around edges of the
6 encapsulated integrated circuit die not including leads electrically connected to the integrated circuit
7 die.

1 7. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further
4 ~~comprising~~comprises:

5 folding a first portion of the lead frame other than the leads or pins around a side of the
6 encapsulated integrated circuit die; and

7 folding a second portion of the lead frame extending from the first portion over a peripheral
8 upper surface of the encapsulated integrated circuit die.

1 8. (Currently Amended) The method of claim 1, wherein the step of folding a portion of the lead
2 frame other than the leads or pins around sides of the encapsulated integrated circuit die and over
3 or adjacent to a peripheral upper surface of the plastic or epoxy material further ~~comprising~~
4 comprises:

5 folding a first portion of the lead frame other than the leads or pins around a side of the
6 encapsulated integrated circuit die; and

7 folding a second portion of the lead frame extending from the first portion adjacent to and
8 level with a peripheral upper surface of the encapsulated integrated circuit die.

1 21. (Previously Added) A method of providing electrostatic discharge protection for an integrated
2 circuit, comprising:

3 encapsulating at least part of an integrated circuit die mounted on a lead frame and a portion
4 of the lead frame with a plastic or epoxy material, leaving lead portions and an electrostatic discharge
5 protection portion of the lead frame unencapsulated; and

6 folding the electrostatic discharge protection portion of the lead frame around the
7 encapsulated integrated circuit die and over or adjacent to a surface of the plastic or epoxy material.

1 22. (Previously Added) The method of claim 21, wherein the step of encapsulating at least part of
2 an integrated circuit die mounted on a lead frame and a portion of the lead frame with a plastic or
3 epoxy material, leaving lead portions and an electrostatic discharge protection portion of the lead
4 frame unencapsulated further comprises:

5 forming the plastic or epoxy material over one surface and sidewalls of the integrated circuit
6 die and over portions of a surface of the lead frame on which the integrated circuit die is mounted,
7 leaving an opposite surface of the lead frame and the lead portions and the electrostatic discharge
8 protection portion of the lead frame unencapsulated.

1 23. (Previously Added) The method of claim 21, wherein the step of encapsulating at least part of
2 an integrated circuit die mounted on a lead frame and a portion of the lead frame with a plastic or
3 epoxy material, leaving lead portions and an electrostatic discharge protection portion of the lead
4 frame unencapsulated further comprises:

5 leaving a contact surface of the integrated circuit die exposed.

1 24. (Previously Added) The method of claim 21, further comprising:

2 mounting the integrated circuit die on a flat lead frame having the lead portions projecting
3 from at least one edge and the electrostatic discharge protection portion projecting from at least one
4 edge.

1 25. (Previously Added) The method of claim 24, wherein the electrostatic discharge protection
2 portion of the lead frame projects from an edge other than an edge from which the lead portions
3 project.

1 26. (Previously Added) The method of claim 24, wherein the electrostatic discharge protection
2 portion of the lead frame projects from an edge from which the lead portions project, the electrostatic
3 discharge protection portion extending around the lead portions and beyond ends of the lead
4 portions.

1 27. (Previously Added) The method of claim 24, wherein the electrostatic discharge protection
2 portion of the lead frame projects from at least two opposing edges of the lead frame.

1 28. (Previously Added) The method of claim 28, wherein the electrostatic discharge protection
2 portion of the lead frame projects from at least three edges of the lead frame, including one edge
3 from which the lead portions project.

1 29. (Previously Added) A method of providing electrostatic discharge protection for an integrated
2 circuit, comprising:

3 forming a flat lead frame having lead portions and an electrostatic discharge protection
4 portion extending from edges thereof;

5 mounting an integrated circuit die on a surface of the lead frame and encapsulating the at
6 least sides of the integrated circuit die and a portion of the lead frame surface on which the integrated
7 circuit die is mounted with an encapsulating material, leaving the lead portions and the electrostatic
8 discharge protection portion of the lead frame projecting beyond the encapsulating material;

9 folding the electrostatic discharge protection portion of the lead frame around one or more
10 sides of the encapsulating material.

1 30. (Previously Added) The method of claim 29, wherein the step of folding the electrostatic
2 discharge protection portion of the lead frame around one or more sides of the encapsulating material
3 further comprises:

4 folding the electrostatic discharge protection portion of the lead frame to extend along the
5 sides of the encapsulating material; and

6 folding the electrostatic discharge protection portion of the lead frame to extend over a
7 periphery of a surface of the encapsulating material opposite the lead frame.

1 31. (Previously Added) The method of claim 29, wherein the step of folding the electrostatic
2 discharge protection portion of the lead frame around one or more sides of the encapsulating material
3 further comprises:

4 folding the electrostatic discharge protection portion of the lead frame to extend along the
5 sides of the encapsulating material; and

6 folding the electrostatic discharge protection portion of the lead frame to extend adjacent to
7 a surface of the encapsulating material opposite the lead frame.

1 32. (Previously Added) The method of claim 29, wherein the step of folding the electrostatic
2 discharge protection portion of the lead frame around one or more sides of the encapsulating material
3 further comprises:

4 folding the electrostatic discharge protection portion of the lead frame around at least two
5 opposing sides of the encapsulating material.